
**SITE SS-010
HEAVY EQUIPMENT
MAINTENANCE
FACILITY**

— RECORD OF DECISION —

***Plattsburgh Air Force Base
Installation Restoration
Program***



prepared for:

**United States Department of The Air Force
Plattsburgh Air Force Base
Plattsburgh, New York**

**Final
August 2000**

SITE SS-010 HEAVY EQUIPMENT MAINTENANCE FACILITY

RECORD OF DECISION

**PLATTSBURGH AIR FORCE BASE
PLATTSBURGH, NEW YORK**

**UNITED STATES DEPARTMENT OF THE AIR FORCE INSTALLATION
RESTORATION PROGRAM**

Prepared By:

URS CONSULTANTS, INC.

FINAL

AUGUST 2000

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DECLARATION FOR THE RECORD OF DECISION

Site Name and Location

Plattsburgh Air Force Base (AFB)
Site SS-010, Heavy Equipment Maintenance Facility
Plattsburgh, New York

Statement of Basis and Purpose

This Record of Decision (ROD) presents the selected remedy for soil and groundwater at site SS-010 on the Plattsburgh Air Force Base (AFB) in Plattsburgh, New York. It has been developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site, a copy of which is located at the Information Repository at the Feinburg Library on the campus of the State University of New York at Plattsburgh.

The remedy has been selected by the United States Air Force (USAF) in conjunction with the United States Environmental Protection Agency (USEPA) and with the concurrence of the New York State Department of Environmental Conservation (NYSDEC) pursuant to the Federal Facilities Agreement among the parties under Section 117(a) of CERCLA, dated July 10, 1991. A copy of the NYSDEC concurrence letter is included as Appendix C of this ROD.

Assessment of the Site

Soil and groundwater at SS-010 were contaminated as a result of surface spills and runoff from the waste accumulation area and maintenance shop. During several investigations from the late 1980s through 1996, the areas of soil contamination were defined. In 1996-1997, approximately 8,670 cubic yards (cy) of contaminated soil were excavated during a removal action and transported off site. The excavated soil was segregated based upon chemical consistency and either landfarmed on base and reused elsewhere on base (soil not containing chlorinated hydrocarbons) or thermally desorbed and disposed of off base (soil containing chlorinated

hydrocarbons). Soils slated for landfarming were placed in the on base landfarm located on the flightline ramp near the alert area and treated by periodic tilling. Sampling of the soils was conducted periodically, and once NYSDEC TAGM levels were met at a particular section (cell) of the landfarm, the soils were removed from the landfarm and used as fill elsewhere on base.

Confirmatory soil sampling of the excavation demonstrated that the remedial goals (NYSDEC TAGM #4046 guidance values) were achieved. In 1993, several chemicals (including fuel-related compounds and chlorinated hydrocarbons) were detected in site groundwater at concentrations above regulatory standards. An additional investigation of groundwater quality conducted in 1999 and 2000 revealed that on site groundwater contamination had attenuated to levels below regulatory standards.

Because the actions undertaken at SS-010 to date have resulted in the reduction of soil contamination to levels below guidance values, and on site groundwater contaminants have attenuated to levels below regulatory standards, the USAF has determined that the principal threats at SS-010 have been eliminated; hence, no further action is necessary to protect public health, welfare or the environment.

Description of the Remedy

Site SS-010 is one of several sites (or Operable Units) administered under the Plattsburgh AFB IRP. RODs have previously been signed for nine operable units at the base, and additional RODs are planned for other sites at the base. It is intended that the proposed action be the final action for site SS-010.

The removal action undertaken in 1996–1997 is considered to have been successful in eliminating the principal threats at the SS-010 site. Sampling and analysis conducted concurrently during removal activities and groundwater sampling conducted subsequent to removal activities indicate that contamination previously present at the site has been reduced to below regulatory levels considered protective of human health. No unacceptable ecological risk is associated with site contaminants. Therefore, no further action will be undertaken at SS-010 and no restriction on reuse of the site through institutional controls will be imposed.

Statutory Determinations

The selected remedy for the SS-010 site is protective of human health and the environment, complies with federal and state Applicable or Relevant and Appropriate Requirements, and is cost effective. In achieving remediation goals during the removal action, resource recovery technologies and treatment technologies were utilized that permanently and significantly reduced the toxicity, mobility, and volume of site contaminants. A five-year review will not be required for this remedy according to Section 121(c) of CERCLA because no hazardous substances, pollutants, or contaminants are remaining at the site above levels that would allow for unlimited use and unrestricted exposure.

Signature ALBERT F. LOWAS, JR.

Director, Air Force Base Conversion Agency

Signature JEANNE M. FOX

USEPA, Regional Administrator

DECISION SUMMARY

1.0 SITE NAME, LOCATION, AND DESCRIPTION

Plattsburgh AFB, located in Clinton County in northeastern New York State, is bordered on the north by the City of Plattsburgh, on the west by Interstate 87, on the south by the Salmon river, and on the east by Lake Champlain. It lies approximately 26 mile south of the Canadian border and 167 miles north of Albany (Figure 1). Plattsburgh AFB was closed on September 30, 1995 as part of the (third round of) base closures mandated under the Defense Base Closure and Realignment Act of 1993, and its reuse is being administered by the Plattsburgh Airbase Redevelopment Corporation (PARC).

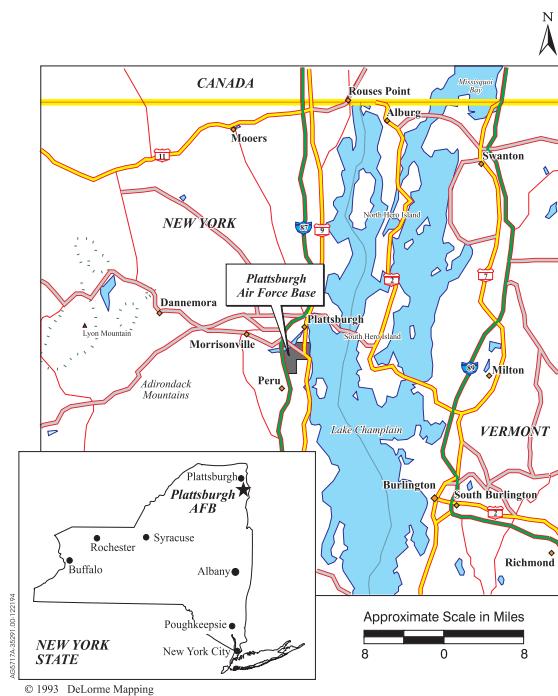


FIGURE 1 – VICINITY LOCATION MAP

As part of the USAF's Installation Restoration Program (IRP) and the Base Realignment and Closure (BRAC) program, Plattsburgh AFB has initiated activities to identify, evaluate, and restore identified hazardous waste sites. The IRP at Plattsburgh AFB is being implemented according to a Federal Facilities Agreement (Docket No. II-CERCLA-FFA-10201), signed between the USAF, USEPA and NYSDEC on July 10, 1991. Plattsburgh AFB was placed on the National Priorities List (NPL) on November 21, 1989. Cleanup is being funded by the USAF.

The Heavy Equipment Maintenance Facility, which housed the 380th Transportation Squadron, is located in the east-central portion of the base, within the industrial area (Figure 2). The 380th Transportation Squadron provided traffic management, vehicle operational services, and vehicle maintenance. The facility was constructed in 1957 and ceased operations in 1995. The initially suspected spill site is situated approximately 150 feet west of Idaho Avenue between Buildings 2540, 2542 and the railroad tracks where a waste accumulation area was located (Figure 3). Additional spill areas also were located along the east side of Building 2540. Building 2540 was used as a maintenance shop for heavy trucks. Building 2542 was used to service base fuel tanker trucks.

Buildings 2540 and 2542 are surrounded by pavement. The former waste accumulation area was situated near the northwest corner of Building 2540. Peripheral areas of mowed lawn separate the edge of pavement southwest of Building 2540 from the railroad tracks. A small woodlot lies across the railroad tracks north-northwest of Building 2540. Drainage ditches are located on each side of the railroad tracks and nearby storm sewers collect and transport surface water runoff away from the site. Federally-regulated wetlands are situated in the wooded area and along the drainage ditches adjacent to the railroad tracks.

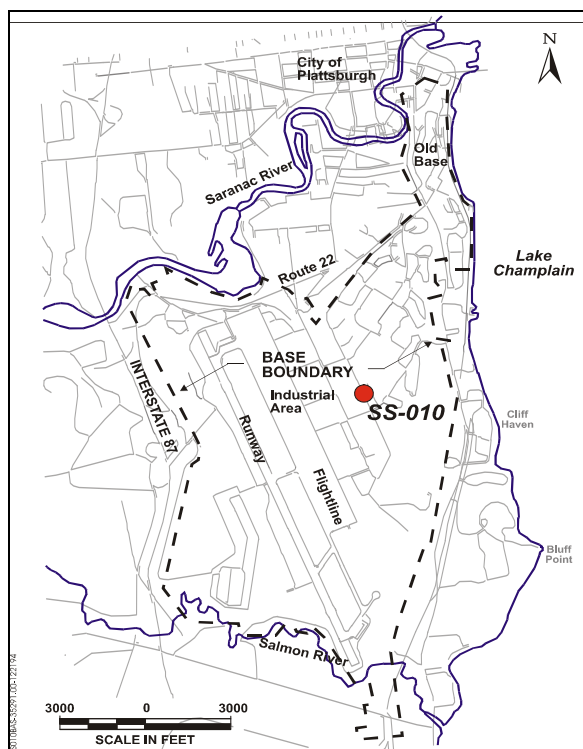


FIGURE 2 - LOCATION OF SS-010

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Figure 3

2.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES

2.1 Contamination Sources

Potential sources of contamination at SS-010 resulted primarily from surface spills and runoff from spill areas and the waste accumulation area associated with the Heavy Equipment Maintenance Facility during its operational period (1957 to 1995). Waste generated at the facility included 10W-30 engine oil (3,900 gallons per year), 30W engine oil (1,800 gallons per year), hydraulic oil (300 gallons per year), transmission fluid (300 gallons per year), PD-680 cleaning solvent (300 gallons per year), lacquer and enamel paint thinners (100 gallons per year), contaminated fuels (240 gallons per year), and battery acid (120 gallons per year). Acids were neutralized before they were discarded into the sanitary sewer, which flows to the City of Plattsburgh Wastewater Treatment Facility.

2.2 Site Inspection

A site inspection (SI) of the Heavy Equipment Maintenance Facility conducted in 1987 consisted of a records search, test pitting, and soil sampling (E.C. Jordan 1989). The records search revealed that there was evidence of spills and potential environmental contamination, and recommendations were made for additional investigations. Surface and subsurface soil samples contained high concentrations of petroleum hydrocarbons (PHCs), and low concentrations of lead and chlorinated solvents. Contaminant concentrations decreased with depth. Groundwater was not evaluated during the SI.

2.3 Remedial Investigation

Between July 1993 and September 1995, an RI (URS 1995) was performed by URS Consultants, Inc. at SS-010 to characterize the magnitude and extent of soil and groundwater contamination. Nine surface soil and 11 subsurface soil samples were collected. In November 1993 and February 1994, three monitoring wells were installed and groundwater sampling was conducted. Sampling locations were concentrated along the drainage swale west of Buildings 2542 and 2540 in the vicinity and downgradient of the former waste accumulation area (Figure 4). The analytical results of the sampled media were used to assess the current and potential future human health and ecological risks under an industrial use setting.

Figure 4

The contamination found at SS-010 was evaluated by comparing results to established requirements and guidelines. The levels of contamination from organic compounds in soil (both surface and subsurface soil) were evaluated by comparing the detected concentrations to guidance values (soil cleanup objectives) specified in the *Technical and Administrative Guidance Memorandum* HWR-94-4046 (TAGM #4046) entitled, "Determination of Soil Cleanup Objectives and Cleanup Levels" (NYSDEC 1994). As recommended in TAGM 4046, levels of contamination from inorganic compounds in soil were evaluated by comparing the detected concentrations to site background levels (URS 1996). Lead levels were compared to the lead guidance value (400 ppm) recommended by USEPA in OSWER Directive #9355.4-12. These are referred to as To Be Considered values (TBCs).

For groundwater, contaminant levels were compared to the site groundwater applicable or relevant and appropriate requirements (ARARs), which are derived from the NYSDEC water quality standards and guidance values specified in the NYSDEC's guidance document entitled, *Technical and Operational Guidance Series* (TOGS) 1.1.1 (June 1998), New York State water standards (Title 6 of New York State Rules and Regulations, Part 703), USEPA drinking water standards (40 CFR 141), and site background TBCs (for metals only).

2.3.1 Surface Soil Contamination

A summary of the levels of contamination found in the SS-010 surface soil and a comparison to soil TBCs is presented in Table 1. Three surface soil samples were collected in unpaved areas of the site. No VOCs were detected above their TBC values. SVOCs reported above TBCs included benzo(a)pyrene and dibenz(a,h)anthracene. No polychlorinated biphenyls (PCBs) or pesticides were present above TBCs. There were six metals (cadmium, calcium, chromium, magnesium, nickel, and zinc) reported at concentrations above TBCs (background levels). In general, the greatest frequency of contaminants with the highest concentrations were found near the former waste accumulation area.

2.3.2 Subsurface Soil Contamination

Eleven subsurface soil samples were collected from five boring locations between 0.25 and 6 feet below ground surface. In addition, four soil samples were taken using a hand auger

TABLE 1

REMEDIAL INVESTIGATION SUMMARY
CHEMICALS DETECTED IN SURFACE SOIL ABOVE TBCs

CHEMICAL	TBC VALUE*	MAXIMUM DETECTED VALUE
SVOCs		
Benzo(a)pyrene	61 µg/kg	170 µg/kg
Dibenz(a,h)anthracene	14µg/kg	30 µg/kg
Metals		
Cadmium	1.3 mg/kg (SB)	3.0 mg/kg
Calcium	30,200 mg/kg (SB)	45,700 mg/kg
Chromium	19.5 mg/kg (SB)	23.3 mg/kg
Magnesium	3,340 mg/kg (SB)	4260 mg/kg
Nickel	13 mg/kg	14 mg/kg
Zinc	63.4 mg/kg (SB)	129 mg/kg

* TBC Values from Soil Cleanup Objectives presented in NYSDEC TAGM #4046 “Determination of Soil Cleanup Objectives and Cleanup Levels” (NYSDEC 1994).

(SB) Site background value used as specified in TAGM #4046. Values from “Background Surface Soil and Groundwater Survey for the Plattsburgh Air Force Base (URS 1996).

mg/kg milligram per kilogram
µg/kg microgram per kilogram

from immediately beneath pavement. Table 2 presents a list of chemicals detected at concentrations above soil TBCs. Organic compounds reported above TBC values included xylene, acetone, 1,1-dichloroethene, ethylbenzene, naphthalene, benzo(a)anthracene, and benzo(a)pyrene. No pesticides, or PCBs were present above TBC values. The metals calcium and magnesium were both detected above TBCs (background levels). All of the VOC and SVOC results that exceeded their TBC values were obtained from samples collected in the vicinity of the waste accumulation area.

2.3.3 Groundwater Contamination

As part of the remedial investigation, two rounds of groundwater samples were collected from three monitoring wells positioned at one upgradient location and two locations downgradient of the former waste accumulation area (Figure 4). Samples were analyzed for target compound list (TCL) organics and target analyte list (TAL) metals. Contaminants detected above NYSDEC groundwater quality standards and base background are given in Table 3.

In the first round of sampling, no organic compounds were reported in samples from MW-10-001 and MW-10-002. Xylene was reported in MW-10-003 above NYSDEC groundwater quality standards. Iron, detected in background well MW-10-001, and sodium and thallium (in MW-10-003) were the only metals detected at concentrations exceeding regulatory criteria and base background levels.

In the second round of sampling, organic compounds detected exceeding regulatory limits included chloromethane, 1,2-dichloroethane, benzene, and xylenes. Chloromethane and 1,2-dichloroethane were detected above regulatory criteria in the upgradient well and in MW-10-003. Iron was the only metal detected at a concentration exceeding regulatory criteria and base background levels. Based upon the detections in the upgradient monitoring well, the likely source for chlorinated solvent contamination was suspected to lie upgradient from SS-010. The low and sporadic detections of the fuel-related compounds (i.e., benzene and xylenes) were attributed to the site soils.

TABLE 2
REMEDIAL INVESTIGATION SUMMARY
CHEMICALS DETECTED IN SUBSURFACE SOIL ABOVE TBCs

CHEMICAL	TBC VALUE*	MAXIMUM DETECTED VALUE
VOCs		
Acetone	200 µg/kg	1,000 µg/kg
1,1-Dichloroethene	400 µg/kg	620 µg/kg
Ethylbenzene	5,500 µg/kg	6,500 µg/kg
Xylene (total)	1,200 µg/kg	40,000 µg/kg
SVOCs		
Naphthalene	13,000 µg/kg	20,000 µg/kg
Benzo(a)Anthracene	224 µg/kg	270 µg/kg
Benzo(a)Pyrene	61 µg/kg	270 µg/kg
Metals		
Calcium	30,200 mg/kg (SB)	203,000 mg/kg
Magnesium	3,340 mg/kg (SB)	9,860 mg/kg

* TBC values from Soil Cleanup Objectives presented in NYSDEC TAGM #4046
“Determination of Soil Cleanup Objectives and Cleanup Levels (NYSDEC 1994)

(SB) Site background value used as specified in TAGM #4046. Values from “Background
Surface Soil and Groundwater Survey for the Plattsburgh Air Force Base (URS 1996)

mg/kg milligram per kilogram

µg/kg microgram per kilogram

TABLE 3
REMEDIAL INVESTIGATION SUMMARY
CONTAMINANTS DETECTED ABOVE NEW YORK STATE GROUNDWATER
QUALITY CRITERIA AND BASE BACKGROUND

Well Location	Month Sampled	Parameter	Units	Detected Concentration	ARAR (1)	Background (2)
MW-10-001	Jan. 1994	Chloromethane	µg/L	13	5	---
MW-10-001	Jan. 1994	1,2-Dichloroethane	µg/L	6.4	5	---
MW-10-001	Nov. 1993	Iron	µg/L	56,800	300	51,600
MW-10-001	Jan. 1994	Iron	µg/L	67,500	300	51,600
MW-10-002	Nov. 1993	Sodium	µg/L	1,440,000	20,000	77,000
MW-10-002	Nov. 1993	Thallium	µg/L	4.3	2	---
MW-10-003	Jan. 1994	Chloromethane	µg/L	19	5	---
MW-10-003	Jan. 1994	1,2-Dichloroethane	µg/L	6.3	5	---
MW-10-003	Jan. 1994	Benzene	µg/L	1.2	0.7	---
MW-10-003	Nov. 1993	Xylene	µg/L	6	5	---
MW-10-003	Jan. 1994	Xylene	µg/L	18	5	---

µg/L microgram per liter

- (1) The most stringent of NYSDEC TOGS 1.1.1 (NYSDEC 1993), Title 6 NYCRR, Part 703, and USEPA Drinking Water Standards, Title 40 CFR, Part 141.
- (2) Final Background Surface Soil and Groundwater Survey for Plattsburgh Air Force Base (URS 1996).

2.4 Delineation Investigation

Between June and September 1996, OHM Remediation Services Corp. (OHM) and Parsons Engineering Science, Inc. (Parsons ES) conducted a delineation investigation at SS-010 to further assess the nature and extent of soil contamination above the water table. The delineation investigation was phased and included a soil gas survey, soil sampling, and analysis of soil gas and soil samples. The investigation covered a broad area, approximately 1,200 feet by 400 feet and extended well beyond previous investigations. Sampling and testing was conducted in the areas surrounding Buildings 2540, 2542, 2545, and 2548. Soil gas screening at 80 locations preceded soil gas analytical testing at the same 80 locations. Soil gas samples were analyzed for the fuel-related benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds and the chlorinated solvents trichloroethene (TCE) and tetrachloroethene (PCE). The soil gas analytical results were used to select soil sampling locations for chemical analysis of volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). Action criteria for the removal action were selected to be the Allowable Soil Concentrations presented in NYSDEC's TAGM #4046. These criteria are more stringent than the Soil Cleanup Goals used in the RI and are recommended to be used by NYSDEC where the water table is close to the ground surface, as is the case at SS-010. The distribution of VOCs reported at concentrations above action criteria in soil samples collected as part of the delineation investigation is depicted in Figure 5. Soil sampling results for VOCs from the RI (compared to the more stringent action criteria) also are shown in Figure 5.

2.5 Removal Action

On 22 August 1996, the USAF informed the USEPA and NYSDEC of their intention to perform a source control removal action to facilitate cleanup of VOC- and SVOC-contaminated soils above the water table at site SS-010. An Action Memorandum was prepared by Parsons ES and OHM in September 1996 to document the proposed removal action (Parsons ES and OHM 1996), which was presented to the public on September 19, 1996. The removal action was based upon the sampling results from the RI and delineation investigation. The USEPA and NYSDEC provided comments on the Action Memorandum which were addressed by the USAF before the initiation of the action. Most soils were excavated and treated at a landfarm operation located

Figure 5

near the former Alert Area on the base flightline prior to use as fill elsewhere on base. A portion of the soil was transported off base for disposal.

Excavations began on December 5, 1996 and were completed on March 27, 1997. Three separate contaminated areas were identified for removal via excavation. These areas are shown in Figure 4. Most of the area requiring excavation was paved, so the asphalt and subbase material was stripped. Soil was removed to the top of groundwater and loaded directly into dump trucks for transport to a staging area. Confirmatory sampling was conducted at the rate of one sample per 50 feet of linear trench during excavations. Soil samples were collected for headspace screening while excavations were ongoing prior to confirmation sampling. Excavation walls were sampled when VOC concentrations in headspace samples were below 10 parts per million (ppm). Activities at each area are discussed separately below. Based on the confirmatory sampling results, all contaminated soil has been removed and the action criteria (NYSDEC TAGM #4046) were met. The USEPA and NYSDEC concurred with these conclusions. A closure report was prepared to document the removal action (OHM 1998).

2.6 Supplemental Groundwater Investigation

In August 1999, five additional groundwater monitoring wells (MW-10-004 through –008) were installed at SS-010, as shown in Figure 4 (URS 2000a). The original three wells (MW-10-001 through –003) were located upgradient or within the areas where soil was excavated and removed during the removal action. Four of the new wells were installed downgradient from the excavated areas to directly evaluate groundwater quality. The fifth new well was installed upgradient to provide additional control for site background groundwater. The new and previously-installed wells were sampled on September 22 through 24, 1999 for Target Compound List (TCL) VOCs and SVOCs. In addition, three of the new wells (MW-10-004, -005, and –007) were sampled again on March 30, 2000 (URS 2000b).

Only one chemical at one well was detected in these recent events (September 1999 & March 2000) at a concentration above New York State groundwater quality criteria; methylene chloride was detected at a concentration of 26.4 micrograms per liter ($\mu\text{g/L}$) in background well MW-10-001. No VOCs or SVOCs were detected at concentrations above New York State criteria in monitoring wells onsite or downgradient from the remediated areas. Therefore, it has been concluded that the removal action has successfully removed the onsite source of

groundwater contamination, and groundwater contaminants have attenuated to levels below regulatory standards.

Detections of chloromethane and 1,2-dichloroethane in background well MW-10-001 in the January 1994 sampling event were not repeated in the September 1999 sample. These compounds also were not detected in the November 1993 event. Since methylene chloride is a common laboratory contaminant, its detection in MW-10-001 in September 1999 may not be indicative of a significant upgradient source. The chlorinated hydrocarbons tetrachloroethene, trichloroethene, and 1,2-dichloroethene were detected at Building 2657 during sampling conducted in August 1998 as part of the Supplemental Evaluation to the Environmental Baseline Survey (an investigation unrelated to SS-010). The sporadic detections of chlorinated hydrocarbons observed at MW-10-001 possibly may be related to contamination associated with Building 2657, which is located about 600 feet north-northwest of site SS-010. Additional groundwater investigations are planned at Building 2657 as part of continuing efforts for the Supplemental Evaluation.

3.0 COMMUNITY PARTICIPATION

The USAF has kept the community informed regarding progress at site SS-010 during Restoration Advisory Board (RAB) meetings open to the public. This board consists of the Base Cleanup Team (BCT) members (key representatives from the USAF, USEPA, and NYSDEC) and seventeen representatives from municipalities, community organizations, and associations including community members with environmental/engineering expertise. The RAB, which was chartered in 1995, serves as a forum for the community to become familiar with the restoration activities ongoing at Plattsburgh AFB and to provide input to the BCT. The RI Report, Removal Action Report, the Proposed Plan (URS 2000c), and other site-related documents in the SS-010 Administrative Record have been made available to the public. The full-length reports have been available at the Information Repository located at the Feinberg Library on the Plattsburgh campus of the State University of New York. The notice of the availability of these documents was published in the *Press Republican* on June 19, 2000. In addition, a 30-day public comment period was held from June 19 to July 18, 2000 to solicit public input. During this period, the public was invited to review the Administrative Record and comment on the preferred alternative being considered.

In addition, a public meeting was held on July 13, 2000 at the Old Court House, Second Floor Meeting Room, 133 Margaret Street, Plattsburgh, NY. The meeting was divided into two segments. In the first segment, data gathered at the site, the preferred alternative, and the decision-making process were discussed. In the second segment, a formal public meeting was held to accept comments about the No Further Action remedial alternative considered for the SS-010 site. Public comments were recorded and transcribed, and a copy of the transcript was added to the Administrative Record and Information Repository. This transcript is included as Appendix A of this Record of Decision. Public comments on the Proposed Plan, and Air Force responses to those comments, are summarized in the Responsiveness Summary which is included as Appendix B.

4.0 SCOPE AND ROLE OF OPERABLE UNIT

Site SS-010 is one of several sites (or Operable Units) administered under the Plattsburgh AFB IRP. Records of Decision have previously been signed for nine operable units at the base, and additional Records of Decision are planned for other sites at the base. It is intended that the proposed action be the final action for site SS-010. A removal action conducted from December 5, 1996 through March 27, 1997 at site SS-010 resulted in the removal of contaminated soil that constituted the principal threat waste at the site. Potential upgradient groundwater contamination, identified in a background well at SS-010, is being addressed through the Supplemental Evaluation to the Basewide Environmental Baseline Survey (EBS) at Plattsburgh AFB.

5.0 SITE CHARACTERISTICS

The site geology consists of a marine/lacustrine sand, approximately 35 feet thick, overlying a relatively impermeable silt and clay unit. The groundwater table is shallow in the vicinity of SS-010, and lies approximately 2 to 5 feet below ground surface. Groundwater generally flows toward the east-southeast. The current chemical condition of the site soil and groundwater is discussed below.

5.1 Soil Contaminant Concentrations

The current chemical conditions of site soil is reflected by the confirmatory soil samples collected from the excavation sides and bottoms during the removal action in 1996 and 1997. The soil action criteria for the confirmatory soil sampling were based upon NYSDEC TAGM #4046 Allowable Soil Concentrations using the following indicator contaminants: TCE, ethylbenzene, xylenes, benzo(a)anthracene, and benzo(a)pyrene. These contaminants were chosen to be representative because of their presence in the soils, toxicity, and inclusion in TAGM 4046. Excavation and remediation of the vadose zone soils were considered complete when the recommended action criteria were achieved at the excavation limits. Confirmatory sampling was conducted during excavation activities at a rate of one sample per every 50 feet of excavation side wall. Sixty-five confirmatory samples were collected along the outer limits of the excavations for analysis of VOCs and/or SVOCs. Excavations were backfilled with clean fill.

5.1.1 Area 1

This area of soil removal was situated east of Building 2540 and was rectangular in shape. The excavated area was approximately 98 feet by 145 feet (average depth 3.3 feet), as shown in Figure 6. Approximately 1,735 cy of soil were removed. Twelve confirmatory samples were collected. Only one exceedance of the action criteria was reported in one sample; chloroform was reported at 5.5 micrograms per kilogram ($\mu\text{g/kg}$) in SS-01-7-B, which is above the 3.0 $\mu\text{g/kg}$ cleanup objective. This minor chloroform exceedance was not considered significant. Furthermore, the area surrounding Area 1 was repaved after backfilling preventing runoff from infiltrating and subsequently leaching to groundwater.

5.1.2 Area 2

Area 2 is located along the east side of Building 2540 and north of Area 1 (Figure 6). It was approximately 150 feet by 140 feet (average depth 3.7 feet) and irregularly shaped. Approximately 2,845 cy of soil were removed. An oil/water separator, which discharged to the sanitary sewer, also was removed as part of the removal effort. The contents of the separator were characterized as nonhazardous. Fifteen confirmatory soil samples were collected from the excavation side walls. After excavation was completed, an exceedance of the action criteria was

Figure 6

noted at one location: S10-2-01A for chloroform (3.8 µg/kg). This concentration was only slightly above the cleanup objective. Furthermore, the entire excavation area was repaved after backfilling, effectively preventing surface runoff from infiltrating and subsequently leaching to groundwater.

5.1.3 Area 3

Area 3 is located west and north of Building 2540. It extended up to and north of Building 2542 (Figure 6). The area was irregularly shaped (average depth 3 to 4 feet) and approximately 4,090 cy of soil were excavated. Thirty-eight confirmatory samples were collected from the excavation side walls. After excavation was completed, VOCs exceeding action criteria were noted at one location: S10-3-11A for xylenes (15.8 µg/kg). Exceedances of the action criteria for SVOCs were noted for only diethylphthalate (DEP). DEP was considered a laboratory contaminant and, since there is no history of its use at the site, it was not considered a contaminant of concern. These minor exceedances were not considered significant. Furthermore, the area was repaved after backfilling, effectively preventing surface runoff from infiltrating and subsequently leaching to groundwater.

5.2 Groundwater Chemical Condition

The current chemical condition of site groundwater is reflected by the most recent groundwater sampling of all eight site monitoring wells in August 1999, and the resampling of three wells in March 2000. Only one chemical at one well was detected in the samples taken during the two events at a concentration above New York State and USEPA groundwater quality criteria; methylene chloride was detected at a concentration of 26.4 ppb in background well MW-10-001. Since methylene chloride is a common laboratory contaminant, its detection may not be indicative of an upgradient source. However this potential upgradient groundwater contamination is being addressed through investigations at Building 2657 as part of the Supplemental Evaluation to the Basewide Environmental Baseline Survey (EBS) at Plattsburgh AFB. No VOCs or SVOCs were detected at concentrations above New York State criteria in monitoring wells on site or downgradient from the remediated areas. Therefore, it has been concluded that the removal action has successfully removed the onsite source of groundwater contamination, and groundwater contaminants have attenuated to levels below regulatory standards.

6.0 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

PARC is responsible for maintaining the base property, marketing and controlling base reuse, leasing and managing property, and developing base facilities, as necessary, to promote advantageous reuse. According to land use plans (PARC 1995), the likely reuse at SS-010 and its surrounding area will be institutional or aviation support (industrial). The *Comprehensive Reuse Plan for Plattsburgh Air Force Base* developed by PARC (PARC 1995) was incorporated into the Environmental Impact Statement (Tetra Tech 1995). Currently, groundwater in the upper sand aquifer at the site is not being utilized as a resource; a public supply of potable water is available. However, New York State considers all “Class GA” waters (groundwater) in the State as having the potential for use as a future potable resource.

The contamination remaining at site SS-010 does not pose a threat to human health or the environment given the expected reuse or any other reuse. Thus, this Record of Decision does not specify any restriction on reuse of the site.

7.0 SUMMARY OF SITE RISKS

7.1 Human Health Risk Assessment

During the RI, a baseline human health risk assessment was conducted to estimate current (adult and teenage trespassers) and future (construction and industrial workers) risks at the site if no remedial action was taken. The assessment followed federal guidelines to estimate the potential carcinogenic and adverse noncarcinogenic health effects due to potential exposure to site contaminants. The calculated cancer risks for both the current and future use scenarios fell within the range of risk established by current USEPA guidelines that can be considered acceptable on a site-specific basis. The calculated noncancer hazard indices for both current and future scenarios fell below the acceptable USEPA-specified Hazard Index of 1.

Although risks to human health were found to be within acceptable levels, a future residential land use scenario was not evaluated in the risk assessment. The USAF subsequently conducted a removal action to address soil contamination at the site. The risk assessment was based upon soil and groundwater samples collected in the RI, which encompassed only a portion of the contaminated area that was ultimately identified during the removal action. All the soil

upon which the risk assessment was based has been excavated and removed from the site, and the site remediated. Thus, the assessment generally overestimates potential risk posed by the site.

Given that the New York State guideline used to determine the limits of soil excavated during the removal action are generally protective of human health and groundwater resources, that groundwater contaminants are not present onsite at concentrations above New York State or USEPA groundwater standards which are protective of human health, and that the risk assessment performed during the RI, although not current, calculated that risks fell within or below USEPA's acceptable guidelines under planned future use scenarios, no unacceptable potential human health risk is associated with any contamination that may be remaining at the SS-010 site.

7.2 Ecological Risk Assessment

A screening level ecological risk assessment was performed to assess the potential impact of exposure to contaminated surface soil on terrestrial organisms. The assessment evaluated the exposure of four representative species (meadow jumping mouse, raccoon, red fox, and red-tailed hawk) to unpaved contaminated surface soil at site SS-010.

A four-step process is utilized for assessing site-related ecological risks for a reasonable maximum exposure scenario: *Problem Formulation* - a qualitative evaluation of contaminant release, migration, and fate; identification of CPCs, ecological receptors, exposure pathways, and known ecological effects of the contaminants; and selection of endpoints for further study. *Exposure Assessment* - a quantitative evaluation of contaminant release, migration, and fate; characterization of exposure pathways and receptors; and measurement of the estimation of exposure point concentration. *Ecological Effects Assessment* - literature reviews, field studies, and toxicity tests linking contaminant concentrations to effects on ecological receptors. *Risk Characterization* - a measurement of estimation of current adverse effects.

The results of the ecological assessment are expressed as a Hazard Quotient (HQ). HQ values for all representative species were calculated to be less than 1, thereby indicating limited site-related risk to ecological receptors. In addition, contaminated soil in much of the paved and unpaved portion of the site was excavated and removed during the removal action subsequent to the ecological risk assessment, thereby eliminating most, if not all, potential future risk from contaminants that were located in unpaved areas.

8.0 DESCRIPTION OF THE SELECTED REMEDY

A removal action conducted from December 5, 1996 through March 27, 1997 at site SS-010 resulted in the removal of contaminated soil that constituted the principal threat waste at the site. As a result, no other alternatives were evaluated to reduce contaminant levels in soil or groundwater at the site. No Further Action is the single and the preferred alternative. This alternative includes the following elements:

- 1) No further action will be undertaken at SS-010.
- 2) No restriction on reuse of the site through institutional controls will be imposed.

9.0 DOCUMENTATION OF SIGNIFICANT CHANGES

There are no significant changes between the preferred alternative presented in the Proposed Plan for site SS-010 and the selected remedy presented in this Record of Decision.

GLOSSARY

Administrative Record: A file established and maintained in compliance with Section 113(K) of CERCLA, consisting of information upon which the lead agency bases its final decisions on the selection of remedial method(s) for a Superfund site. The Administrative Record is available to the public.

Applicable or Relevant and Appropriate Requirements (ARARs): ARARs include any state or federal statute or regulation that pertains to protection of public health and the environment in addressing certain site conditions or using a particular remedial technology at a Superfund site. A state law to preserve wetland areas is an example of an ARAR. USEPA must consider whether a remedial alternative meets ARARs as part of the process for selecting a remedial alternative for a Superfund site.

Carcinogenic Compound: A chemical that may produce cancer.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The act requires federal agencies to investigate and remediate abandoned or uncontrolled hazardous waste sites.

Ecological Receptors: Fauna or flora in a given area that could be affected by contaminants in surface soils, surface water, and/or sediment.

Groundwater: Water found beneath the earth's surface that fills pores within materials such as sand, soil, gravel, and cracks in bedrock, and often serves as a source of drinking water.

Inorganic Compounds: A class of naturally occurring compounds that includes metals, cyanide, nitrates, sulfates, chlorides, carbonate, bicarbonate, and other oxide complexes.

Installation Restoration Program (IRP): The U.S. Air Force subcomponent of the Defense Environment Restoration Program (DERP) that specifically deals with investigating and remediating sites associated with suspected releases of toxic and hazardous materials from past activities. The DERP was established to clean up hazardous waste disposal and spill sites at Department of Defense facilities nationwide.

Monitoring: Ongoing collection of information about the environment that helps gauge the effectiveness of a cleanup action. Information gathering may include groundwater well sampling, surface water sampling, soil sampling, air sampling, and physical inspections.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): The NCP provides the organization structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. The NCP is required under CERCLA and the Clean Water Act, and the USEPA has been delegated the responsibility for preparing and implementing the NCP. The NCP is applicable to response actions taken pursuant to the authorities under CERCLA and the Clean Water Act.

National Priorities List: The USEPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program.

Noncarcinogenic Compound: A chemical that may produce adverse health effects other than cancer.

Organic Compounds: Any chemical compounds built on the carbon atom, i.e., methane, propane, phenol, etc.

Petroleum Hydrocarbons (PHCs): The mixture of hydrocarbons and small amounts of other substances that make up petroleum. Hydrocarbons are chemical compounds consisting of carbon and hydrogen, and are found in gasoline, naphtha, and other products produced by refining processes.

Polychlorinated Biphenyl (PCB): A compound that formerly was used as a lubricant and transformer coolant.

Proposed Plan: A public document that solicits public input on a recommended remedial alternative to be used at a National Priorities List (NPL) site. The Proposed Plan is based on information and technical analysis generated during the RI/FS. The recommended remedial action could be modified or changed based on public comments and community concerns.

Record of Decision (ROD): A public document that explains the remedial alternative to be used at a National Priorities List (NPL) site. The ROD is based on information and technical analysis generated during the Remedial Investigation, and on consideration of the public comments and community concerns received on the Proposed Plan. The ROD includes a Responsiveness Summary of public comments.

Remedial Action: A long-term action that stops or substantially reduces a release or threat of a release of hazardous substances that is serious but not an immediate threat to human health or the environment.

Remedial Alternatives: Options evaluated to address the source and/or migration of contaminants to meet health-based or ecology-based remediation goals.

Remedial Investigation (RI): The Remedial Investigation determines the nature, extent, and composition of contamination at a hazardous waste site and directs the types of remedial options that are developed in the Feasibility Study.

Semivolatile Organic Compound (SVOCs) : Organic constituents which are generally insoluble in water and are not readily transported in groundwater.

Source: Area at a hazardous waste site from which contamination originates.

Superfund: The trust fund, created by CERCLA out of special taxes, used to investigate and clean up abandoned or uncontrolled hazardous waste sites. Out of this fund the USEPA either: (1) pays for site remediation when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work or (2) takes legal action to force parties responsible for site contamination to clean up the site or pay back the federal government for the cost of the remediation. Federal facilities are not eligible for Superfund monies.

Technical and Administrative Guidance Memorandum (TAGM): TAGM 4046 issued by NYSDEC Bureau of Hazardous Waste Remediation establishes chemical-specific soil cleanup objectives in the vadose zone. The document is entitled, "Determination of Soil Cleanup Objectives and Cleanup Levels" (NYSDEC 1994).

Terrestrial Wildlife: Animals living on land (e.g., reptiles, small mammals, small birds, predatory mammals, predatory birds).

To Be Considered (TBCs): Federal and state policies, advisories, and other non-promulgated health and environment criteria, including numerical guidance values, that are not legally binding. TBCs are used for the protection of public health and the environment if no specific ARARs for a chemical or other site conditions exist, or if ARARs are not deemed sufficiently protective.

Volatile Organic Compounds (VOCs): Organic compounds that have a high propensity to volatilize or to change from a liquid to a gas form.

REFERENCES

- E.C. Jordan, Co. 1989. *Installation Restoration Program, Final Site Inspection Report, Plattsburgh Air Force Base, Plattsburgh, New York.*
- New York State Department of Environmental Conservation (NYSDEC). 1993. *Ambient Water Quality Standards and Guidance Values*, TOGS 1.1.1. Albany: Division of Water. (last updated June 1998).
- _____. 1994. *Determination of Soil Cleanup Objectives and Cleanup Levels*, Technical and Administrative Guidance Memorandum HWR-94-4046 (TAGM #4046). Albany: Division of Hazardous Waste Remediation (Currently the Division of Environmental Remediation).
- OHM Remediation Services Corp. (OHM). 1998. *Remedial Actions at Spill Site 010, Heavy Equipment Maintenance Facility, Part 1 – Delineation Investigation Report and Part 2 – Closure Report*, March.
- Parsons Engineering Science, Inc. and OHM Remediation Services Corp. (Parsons ES and OHM). 1996. *Action Memorandum, Spill Site SS-010, Heavy Equipment Maintenance Facility, Plattsburgh Air Force Base, Plattsburgh, New York*. 17 September.
- Plattsburgh Airbase Redevelopment Corporation (PARC). 1995. *Comprehensive Reuse Plan for Plattsburgh Air Force Base*. 15 September (subject to revision).
- Tetra Tech. 1995. *Final Environmental Impact Statement, Disposal and Reuse of Plattsburgh Air Force Base, New York*. Prepared for the Plattsburgh Airbase Redevelopment Corporation.
- URS Consultants, Inc. (URS). 1995. *Heavy Equipment Maintenance Facility (SS-010) Remedial Investigation Report (Draft-Final)* September.

- _____. 1996. *Background Surface Soil and Groundwater Survey for Plattsburgh Air Force Base* (Final). January.
- _____. 2000a. *Supplemental Groundwater Sampling Event at the IRP Site SS-010 Monitoring Wells*. Revised January 2000.
- _____. 2000b. Letter from Donald Hunt (URS Consultants, Inc.) to Roy Willis (AFCEE/ERB), Resampling of Selected Wells at SS-010. May 11, 2000.
- _____. 2000c. *SS-010 Heavy Equipment Maintenance Facility Proposed Plan*, Final. January.
- United States Environmental Protection Agency (USEPA). 1989b. *Risk Assessment Guidance of Superfund, Vol I: Human Health Evaluation Manual (Part A)*, Interim Final (EPA/540/1-89/002). Cincinnati, OH: Office of Emergency and Remedial Response.
- _____. 1989c. *Risk Assessment Guidance for Superfund. Vol II. Environmental Evaluation Manual*, (EPA/540/1-89/001). Cincinnati, OH: Office of Emergency and Remedial Response.
- _____. 1991a. *Summary Report on Issues in Ecological Risk Assessment*, (EPA/625/3-91-018), Risk Assessment Forum. Cincinnati, OH: USEPA.
- _____. 1993. *Presumptive Remedy Approach*, EPA/540/F93/048. Cincinnati, OH.
- _____. 1999a. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*. EPA 540-R-98-031. July.
- _____. 1999b. *Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites*. OSWER Directive 9285.7-28P.

APPENDIX A
TRANSCRIPT OF PUBLIC MEETING

COMPLETED

PLATTSBURGH AIR FORCE BASE
PLATTSBURGH, NEW YORK

1491 37

SITE SS-010, HEAVY EQUIPMENT
MAINTENANCE FACILITY

SITE SS-018, AUTO HOBBY SHOP
AND

SITE SS-028, OPEN STORAGE AREA

P U B L I C H E A R I N G

As recorded on Thursday, July 13, 2000
at 7:00 p.m., at the Old Courthouse
133 Margaret Street, 2nd Floor,
Plattsburgh, New York.

APPEARANCES:

MICHAEL SOREL, CHAIRMAN
BRUCE PRZYBYL
JOSEPH SZOT
STEVEN GAGNIER

COURT REPORTERS ASSOCIATES
117 Bank Street
Burlington, Vermont

JULY 13, 2000

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1491 38

MR. SOREL: Okay. I'd like to begin the public meeting for these Sites SS-010, the Heavy Equipment Maintenance Facility and SS-018 and 028, the Auto Hobby Shop and the Storage Area here.

I'm Mike Sorel, the BRAC Environmental Coordinator working for the Air Force Base Conversion Agency of Plattsburgh. I will be presiding over this meeting, the main purpose of which is to allow the public the opportunity to comment on the Air Force's actions for these sites.

Assisting me tonight is Bruce Przybyl, the project manager at Plattsburgh for URS Greiner, Inc., Steve Gagnier and Dave Farnsworth with the Air Force Base Conversion Agency, and Joe Szot with the Air Force Center for Environmental Excellence. We are here to provide answers to technical questions you may have about the remedial alternatives being considered by the Air Force.

Tonight's agenda will consist of a summary of data gathered at the sites and a description of the preferred remedial actions. After that, we will move to the most important part of this meeting -- the part where you provide your comments on the

1 remedial actions.

2 First, however, I need to take care of several
3 administrative details.

4 As you can see, everything being said here is
5 being taken down word-for-word by a professional
6 court reporter. The transcript will become part of
7 the administrative record for these sites. We would
8 like everyone to complete the sign-in sheet at the
9 door. We'll use the sheet to review our mailing
10 list for the site. At the conclusion of the
11 presentation we will open the floor to comments and
12 questions. If you have a prepared statement, you
13 may read it out loud or turn it in without reading
14 it. In any case, your comments will become part of
15 the record. We have cards at the front table for
16 your use for written comments. If you turn in any
17 written comments, please write your name and address
18 on them.

19 If you later decide to make a comment you may
20 send additional comments to us at this address. We
21 will accept comments until July 18, 2000. I will
22 show the address slide again at the end of the
23 meeting.

24 The final point is that our primary purpose
25 tonight is to listen to you. We want to hear your

1 comments on any issues you are concerned about and
2 we'll try to answer any questions you may have. We
3 want you to be satisfied that the action we take
4 will properly and fully address the problems at the
5 Site.

6 Now I'd like to turn the meeting over to Bruce
7 Przybyl.

8 MR. PRZYBYL: Thank you, Mike. Good
9 evening. I'd like to talk to you today about the
10 Air Force's recommended alternatives for remedial
11 action for three Installation Restoration Program
12 Sites at the Plattsburgh Air Force Base. Site
13 SS-010, the Heavy Equipment Maintenance Facility;
14 Site SS-018, the Auto Hobby Shop, and Site SS-028,
15 which is an Open Storage Area.

16 This presentation will be divided into two
17 segments. In the first segment, we will discuss
18 Site SS-010, which is located in the industrial area
19 that supported flightline operations on the newer
20 portion of the base southwest of Route 9. We'll
21 have a question and answer period and proceed with
22 the discussion of Site SS-018 and Site SS-028 which
23 are located adjacent to one another on the older
24 portion of the base, northeast of Route 9. One
25 Combined Remedial Action is proposed for these two

1 sites. Discussion will then be open again to your
2 questions.

3 The Heavy Equipment Maintenance Facility
4 designated as Site SS-010, is located about 2000
5 feet east of the flightline and adjacent to Idaho
6 Avenue. Oil, fuels and solvents were accidentally
7 spilled at the facility which served as a vehicle
8 operational and maintenance shop.

9 This overhead summarizes the Air Force action at
10 the site. The Air Force initiated investigation of
11 the site with a site inspection in 1987. The
12 investigation represented additional sampling which
13 was undertaken between 1983 and 1985. The results
14 were presented in a remedial investigation report
15 which recommended that soil contaminated by spills
16 be further delineated and remediated. Following
17 further delineation in 1996, the public was informed
18 of the Air Force's intention to remove the
19 contaminated soil through an Action Memorandum and
20 Public Meeting. In 1996 and 1997, the contaminated
21 soil was removed. In 1999, additional investigation
22 of groundwater was undertaken to evaluate the impact
23 of the removal action on groundwater quality. The
24 Air Force's intention to remove contaminate at the
25 site was reviewed in a public meeting in 1996 and in

1 1998 contaminated soils were removed.

2 In 1999, additional investigation of groundwater
3 was undertaken on groundwater quality. The Air
4 Force in conjunction with the EPA and New York State
5 then developed a proposed plan for the site. The
6 recommended alternative is that no further action is
7 necessary. Following public review, an ROD will be
8 signed to formalize this alternative.

9 This overhead shows the site features. Initial
10 investigation was focussed on a waste accumulation
11 area northwest of Building 2540 where waste oils and
12 solvents were stored prior to disposal, right in
13 this area, and waste oils and solvents were stored
14 there prior to disposal. Additional investigation
15 revealed soil contamination extended to the east
16 side of Building 2540. These contaminated soil
17 areas are shown on this figure, Area One, Two and
18 Three. Groundwater flows toward the southeast in
19 that direction. During the RI in 1993, three
20 monitoring wells were installed relatively close to
21 the waste accumulation pad. These three wells in
22 this area right here, one, two and three. The
23 chlorinated solvents chloromethane and
24 1,2-dichloroethene and the fuel-related compounds
25 benzene and xylene were detected in these wells at

1 levels above New Your State groundwater standards.
2 Soil contamination detected on site at the immediate
3 area was suspected to be the source of this
4 contamination. Therefore, additional delineation of
5 contaminated soil was undertaken. Fuel-related
6 compounds and chlorinated solvents were found over a
7 much larger area than originally thought.

8 In 1996 and 1997, over 8,500 cubic yards of soil
9 was excavated from the three areas shown. The
10 average depth of excavation was between three and
11 four feet. Soil samples were taken from the
12 sidewalls of the excavation to evaluate all the
13 contaminated soil was removed. Most of the soils
14 were treated at a landfarm operation at the north
15 end of the flightline. Soils containing chlorinated
16 solvents were segregated and disposed of off base.

17 In 1999, five additional groundwater monitoring
18 wells were installed to evaluate the effect of the
19 removal action on groundwater quality. In two
20 sampling events, contamination was not found in the
21 on-site wells at concentrations above New York State
22 groundwater standards, which are considered
23 protective of human health. These wells are located
24 here downgradient from the area where soils were
25 removed. Therefore, the Air Force recommends that

1 no further action should be taken at Site SS-010 and
2 no restriction on reuse of the site is necessary.

3 This recommendation is appropriate because soil and
4 groundwater contamination is no longer present
5 on-site at levels that threaten human health.

6 Any questions?

7 MR. SOREL: No questions? Then we'll
8 move on to the next site.

9 MR. PRZYBYL: The Auto Hobby Shop,
10 designated as Site SS-018 and the Open Storage Area
11 designated as Site SS-028 are located between Lake
12 Champlain and Wisconsin Street on the Old Base
13 portion of Plattsburgh.

14 The Auto Hobby Shop, SS-018, is situated in
15 Building 509. Building 509 was built by the Army in
16 1926 and used as a parking garage. Prior to that
17 time, the Army used the area for coal storage.
18 After a large coal storage shed was destroyed by
19 fire sometime between 1903 and 1924, the area was
20 regraded, which may account for the coal pieces,
21 dust and cinders found in the fill in this area.
22 This is Site SS-028.

23 The Open Storage Area stands northward from
24 Building 508 and was used by the Air Force for
25 general storage of equipment and containerized

1 materials. Sites SS-018 and SS-028 have been
2 combined into one action because they lie adjacent
3 to one another and are affected by similar
4 environmental problems. Two other sites located
5 nearby include Site SS-019, a Civil Engineering
6 Paint Shop and SS-025, the Abandoned Underground
7 Storage Tank. This is Site SS-019 and this is
8 ST-025. Both these other two sites have been
9 previously investigated and have been closed for
10 further action or investigation by the Air Force.

11 This overhead summarizes Air Force action at the
12 two sites. The Air Force initiated investigation at
13 Site SS-018 with a records search and soil gas
14 survey in 1987. Subsequently, a remedial
15 investigation was performed in 1992 to 1996. At
16 Site SS-028, a preliminary assessment consisting of
17 a records search and site investigation was
18 conducted in 1992. Further investigation was
19 recommended. In 1994, a site investigation was
20 conducted at SS-028. In 1997, the Air Force, USEPA
21 and New York State decided to combine the two sites
22 into one path and a remedial investigation was
23 conducted which gathered additional data and
24 combined the data bases from both sites. The
25 assessment included assessment of human health

1 risk. This is SS-018, combines the two sites. In
2 the RI, an area of contaminated soil was identified
3 which was considered a source for the groundwater
4 contamination detected at the sites. Therefore, the
5 Air Force conducted a removal action to excavate and
6 remove this soil. In 1998, an action memorandum was
7 prepared detailing the planned removal action which
8 was presented to the public. The removal action was
9 executed between December, 1998 and June, 1999 and
10 the RI was then finalized. The Air Force has
11 prepared a proposed Plan to address the remaining
12 environmental issues at the site. The preferred
13 alternative includes institutional controls on
14 development and on the use of groundwater. The
15 alternative includes groundwater monitoring.

16 Following the public review, a Record of
17 Decision will be signed to finalize the alternative
18 that is ultimately selected.

19 The geology underlying the two sites consists of
20 sand and silty sand overlying relatively impermeable
21 clay and limestone bedrock. The topography slopes
22 steeply to the east toward Lake Champlain.
23 Groundwater flows eastward toward the Lake in the
24 sand aquifer. The clay outcrops along the steep
25 slope above the lake level, and groundwater

1 is expressed from a seepage face at that point.
2 Although contamination was detected in groundwater
3 at the site, no contamination was detected in water
4 samples taken from seeps along this seepage face on
5 the slope above Lake Champlain. Although
6 contamination was detected in groundwater at the
7 site, no contamination was detected in the seepage
8 face.

9 Samples taken during the various investigations
10 are shown on this overhead. Overall, close to 100
11 soil samples were taken and eleven groundwater
12 monitoring wells were installed and sampled in
13 multiple sampling events. Two groundwater seep
14 samples also were collected from above the
15 lakeshore. Those two sites (indicating).

16 Two types of contamination were identified in
17 soils at the sites. High levels of polycyclic
18 aromatic hydrocarbons or PAHs were detected in the
19 fill material in the eastern portion of the sites.
20 In that area (indicating). These compounds are
21 associated with the incomplete burning of fossil
22 fuels and may be related to the coal fire and
23 subsequent regrading prior to the construction of
24 the Air Base.

25 Chlorinated solvents, such as tetrachloroethene

1 and dichloroethene, also were detected in soil, with
2 the highest concentrations along the northern fence
3 line at the location of Boring G-17. That is right
4 there (indicating). These chemicals are likely
5 present as a result of spills running off of the
6 paved surface of the open storage area onto the
7 adjacent soil. There is the paved area and this
8 area beyond the fence is the soil covering. The
9 highest concentrations of chlorinated solvents in
10 groundwater were detected immediately downgradient
11 from this area. And these wells here were
12 contaminated. This is where the groundwater
13 contamination was the highest. In contrast the PAH
14 compounds were not detected in groundwater as a
15 result of much lower solubilities.

16 However, the Compound MTBE, which is an additive to
17 gasoline, also was detected at the sites. However,
18 this compound is suspected to originate upgradient
19 and is not thought to be associated with the sites.

20 As a result of our analysis, the Air Force
21 decided to remove the soil containing high levels of
22 chlorinated solvents in order to address the source
23 of contaminated groundwater contamination. That is
24 this area here (indicating). About 150 tons of soil
25 was removed during the action. This photograph --

1 we probably have a better picture -- shows the open
2 excavation. The depth of the excavation ranges from
3 two and a half to four feet. Contaminated soil was
4 removed from the site and thermally desorbed in New
5 Hampshire.

6 Confirmatory soil samples were collected from
7 the side walls and the bottom to determine if all
8 the contaminated soils were removed from the area.
9 They are shown right here. When the final
10 excavation was completed, all confirmatory sample
11 results indicated that the compounds of concern were
12 below remediation goals and that the contaminated
13 soil had been removed.

14 The area was then filled with clean soil and
15 restored to its original condition as shown in that
16 photograph.

17 As part of the RI a risk assessment was
18 performed given the expected future use of the
19 sites. This expected use is a bike or walk path
20 along the site's eastern boundary and commercial use
21 of the rest of the area. The bike path is now under
22 construction. Calculations indicated that cancer
23 and non-cancer risks fell within acceptable levels,
24 the cancer risk series from one-tenth to minus four
25 is considered acceptable by USEPA on a case-by-case

1 basis. And as you can see our risk fell at or
2 within the acceptable levels for both cancer and
3 non-cancer risk. Most of the risk that was
4 calculated resulted from potential exposure to the
5 PAHs in the soil. Risk calculations based on a
6 residential reuse scenario were not performed,
7 although it is likely that the risk would be
8 slightly higher given residential reuse compared to
9 the planned commercial and recreational reuse. It
10 should be noted that because Building 508 and 509
11 are historic buildings and are not suited to
12 residential use, it is highly unlikely that
13 residential development would occur in the future.

14 The preferred alternative includes five elements:
15 Institutional restrictions will be imposed to limit
16 the site to non on-site residential reuse. This
17 restriction addresses any potential risk associated
18 with residential reuse, which was not evaluated in
19 the risk assessment.

20 In addition, restrictions will be imposed for
21 the use of the underlying groundwaters. These
22 restrictions are necessary because contaminants are
23 currently present in groundwater above the New York
24 State groundwater standards. Restrictions will be
25 lifted after the contaminants attenuate to below

1 standards over time. This is expected since the soil
2 remedial action likely removed the major source of
3 groundwater contamination. In addition,
4 restrictions will be imposed to discharge of
5 groundwater without prior approval of New York
6 State. This is necessary to assure protection of
7 surface water resources while groundwater levels are
8 above standards.

9 The fourth element of the alternative is that
10 periodic monitoring of groundwater and seeps in
11 groundwater will be undertaken until the groundwater
12 standards are achieved. The data collected will be
13 used to evaluate the continued effectiveness of the
14 remedy in protecting human health.

15 The USEPA and Air Force will review the data
16 collected, at minimum, once every five years to
17 evaluate the continuing effectiveness of the
18 actions.

19 Are there any questions?

20 MR. SOREL: No questions? If you
21 should later decide to make additional comments on
22 the proposed action, please mail them to this
23 address by July 18th. Also I'd like to add that the
24 proposed plans are available for review at the
25 Information Repository located in the Special

1 Collections Section at SUNY Plattsburgh. That
2 concludes the meeting. Thank you for coming.

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4 (The hearing concluded at 7:20 p.m.)

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C E R T I F I C A T E

I, Carol A. Boone, Notary Public and Court Reporter, hereby certify that the foregoing pages, numbered 2 through 18 inclusive, are a true and accurate transcription to the best of my ability of a public hearing of REMOVAL ACTION AT SITE SS-010, SS-018, AND SS-028, in the matter of PLATTSBURGH AIR FORCE BASE, taken before me on the 13th day of July, 2000, at the Old Courthouse, 133 Margaret Street, 2nd Floor, Plattsburgh, New York.

I further certify that I am not related to counsel, counsel's law firm, nor any party to the case in this matter, nor do I have any interest in the outcome of the case.

Carol A. Boone

Carol A. Boone, Court Reporter

TAB

Appendix B Responsiveness Summary



DEPARTMENT OF THE AIR FORCE
AIR FORCE BASE CONVERSION AGENCY

July 24, 2000

MEMO FOR RECORD

SUBJECT: Responsiveness Summary: Public Comment Period for Remedial Action at SS-010, Heavy Equipment Maintenance Facility; SS-018, Auto Hobby Shop; and SS-028, Open Storage Area

A. OVERVIEW

Spill Site SS-010, the Heavy Equipment Maintenance Facility, is located about 2,000 feet east of the flightline and adjacent to Idaho Avenue. Oil, fuel, and solvents were accidentally spilled at the facility, which served as a vehicle operational and maintenance shop.

The Air Force initiated investigation of the site with a site inspection in 1987. The investigation recommended additional sampling, which was undertaken between 1993 and 1995. The results were presented in a remedial investigation report which recommended that soil contaminated by spills be further delineated and remediated. Following further delineation in 1996, the public was informed of the Air Force's intention to remove the contaminated soil through an Action Memorandum and Public Meeting. In 1996 and 1997, the contaminated soil was removed. In 1999 additional investigation of groundwater was undertaken to evaluate the impact of the removal action on groundwater quality. Based on the results, the Air Force concluded that soil and groundwater contamination at SS-010 was no longer present at levels that threaten human health.

The Air Force, in conjunction with the U.S. Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC), then developed a Proposed Plan for the site. The Air Force's recommended alternative for SS-010 is that no further action is necessary, and that no restriction on reuse of the site is necessary.

Spill Site SS-018/028 is comprised of the Auto Hobby Shop (SS-018) and the Open Storage Area (SS-028). They are located between Lake Champlain and Wisconsin Street on the Old Base portion of the base. At various times in the past, the Auto Hobby Shop was used as a parking garage and for coal storage. A fire sometime between 1903 and 1924 destroyed a large coal storage shed. The Open Storage Area extends northward from Building 508 (B/508) and was used by the Air Force for general storage of

equipment and hazardous materials. Sites SS-018 and SS-028 have been combined into one action because they lie adjacent to one another and are affected by similar environmental problems.

The Air Force initiated investigation at Site SS-018 with a records search and soil gas survey in 1987. Subsequently, a Remedial Investigation (RI) was performed in 1992 to 1996. At Site SS-028, a preliminary assessment consisting of a records search and site inspection was conducted in 1992. Further investigation was recommended. In 1994, a site investigation was conducted at SS-028. In 1997, the Air Force, EPA, and NYSDEC decided to combine the two sites into one path. A Remedial Investigation was conducted to gather additional data. The assessment included evaluation of human health risk. In the RI, an area of contaminated soil was identified which was considered a source for the groundwater contamination detected at the sites. The Air Force conducted a Removal Action to excavate and remove this soil.

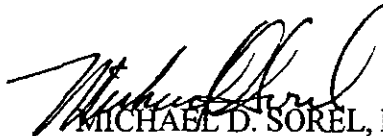
In 1998, an Action Memorandum was prepared detailing the planned Removal Action. After presentation to the public, the Removal Action was executed between December 1998 and June 1999. The RI was then finalized, and the Air Force prepared a Proposed Plan to address the remaining environmental issues at the site. The preferred alternative includes institutional controls on development and on the use of groundwater, as well as groundwater monitoring.

B. PUBLIC MEETING & PUBLIC COMMENT PERIOD

A Public Meeting was held on the remedial action for SS-010 and SS-018/028 on July 13, 2000, at 7:00 p.m. It was held at the Old Court House in the City of Plattsburgh, County of Clinton, NY. A prepared statement was read by Mr. Michael D. Sorel, PE, the Site Manager/Base Realignment and Closure (BRAC) Environmental Coordinator for the Air Force Base Conversion Agency (AFBCA). Mr. Bruce Przybyl of URS Greiner, Inc., detailed the proposed remedial actions for the audience. The floor was then opened to the public for questions and comments. Concluding the meeting was a statement by Mr. Sorel that additional comments could be sent to the Air Force. As advertised in the Plattsburgh *Press-Republican*, the public comment period ran from June 19, 2000 to July 18, 2000. The Public Meeting was recorded by Ms. Carol Boone, a court reporter of Court Reporters Associates, Burlington, Vermont.

C. SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND AGENCY RESPONSES

No comments or questions were received by the Air Force regarding the Proposed Plans for Sites SS-010 or SS-018/SS-028 during the public comment period or at the public meeting.


MICHAEL D. SOREL, PE
Site Manager/
BRAC Environmental Coordinator

SIGN-IN SHEET

NAME	ORGANIZATION	PHONE NUMBER
Rita Mitchell	Clinton Co. Health	565-4870
RICHARD WILD	NYS- DEC	897-1234
JOSEPH SZOT	USAF	562-2871
Bruce Przybyl	URS	566-7022
Carol Boone	Cent Reporters Associates	800-439-4593

APPENDIX C
NYSDEC CONCURRENCE LETTER

New York State Department of Environmental Conservation

Division of Environmental Remediation

50 Wolf Road, Albany, New York 12233-7010

Phone: (518) 457-5861 • FAX: (518) 485-8404

Website: www.dec.state.ny.us

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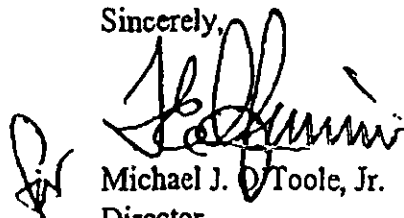
Mr. Richard L. Caspe
Director
Emergency & Remedial Response Division
U.S. Environmental Protection Agency
Region II
Floor 19 - #E38
290 Broadway
New York, NY 10007-1866

Dear Mr. Caspe:

RE: Record of Decision
SS-010
Plattsburgh Air Force Base - ID No. 510003

In response to the Draft Final Record of Decision for SS-010 (Heavy Equipment Maintenance Facility) submitted by the United States Air Force, I wish to concur with the remedial action plan as put forth in the document. Based upon the information provided, the contamination at this site has been removed and no further action appears warranted at this site.

Sincerely,



Michael J. Toole, Jr.

Director

Division of Environmental Remediation

c: G. Anders Carlson, NYSDOH
D. Steenberge, NYSDEC-Region 5
M. Sorel, USAF
R. Wing/R. Morse, USEPA-Region II

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